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CONTRIBUTIONS FROM THE GRAY HERBARIUM OF
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NEW SERIES. — No. XXII.

BY M. L. FERNALD.

- I. The Northeastern *Carices* of the Section *Hyparrhenas*.
II. The Variation of some Boreal *Carices*.

WITH FIVE PLATES.

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I. — THE NORTHEASTERN CARICES OF THE SECTION
HYPARRHENAE.

THE Carices of Koch's subgenus *Vigneae*, with its sections *Acroarrhenae* and *Hyparrhenae* of Fries, have always perplexed the systematist, and by the general student they have as a rule been ignored or vaguely referred to such characteristic species as *Carex straminea* or *C. echinata*. Recently, however, the generally widening interest in systematic botany has brought together in *Carex*, as in other groups, a large mass of material; and an attempt to identify these specimens has made it necessary to study in great detail the minuter but tolerably constant characteristics of the fruiting plants.

In general, the classification of Carices has always been based upon characters in the inflorescence; and although the detailed study of the perigynia (or utriculi) has been the final resort of the specialist, an attempt has been made in our manuals to separate species as much as possible upon the more obvious characters of the inflorescence. Thus *Carex scoparia* is described in the two current manuals as having the spikelets (spikes) "all contiguous or bunched" or "usually aggregated;" while in only one of these works is Boott's var. *minor* given recognition, and there as a mere dwarf variety. Yet in plants which are undoubtedly *C. scoparia* the spikelets are often scattered, forming a loose moniliform spike; and the northern plant described by Boott as var. *minor* has a distinct range and unique habitat, while its minute thick-bodied perigynia distinguish it at a glance from the more southern species with which it has been associated.

The case of *Carex scoparia* is only one of many in which the attempt to rely upon superficial characteristics has led us to confuse plants